IN THE CLAIMS

1. (Original) A method for managing network elements in a communications network comprising:

establishing a hierarchy of geographical areas in the communication network, where an area at a higher level of the hierarchy includes a plurality of areas at a lower level of the hierarchy;

representing each network element in a geographical area at a first level in the geographical hierarchy; and

summarizing the representation of network elements at a second level in the geographical hierarchy, higher than the first level of the geographical hierarchy.

2. (Currently Amended) The method of claim 1 in which the establishment of ~~a~~ the hierarchy of geographical areas includes establishing ~~a hierarchy of~~ *n* levels of geographical areas in the network, where each *n*th level geographical area includes a plurality of (*n*-1)th level geographical areas, and in which the summarization of network elements includes summarizing the representation of network elements at (*n*-1) levels of geographical areas.

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3. (Currently Amended) The method of claim 1 wherein the management of the communication network includes monitoring the condition of the network elements, in which the representation of network elements in ~~a~~ the geographical area includes representing the condition of network elements, and in which the summarization of network elements at ~~a~~ the higher level in the geographical hierarchy includes triggering an alarm at the second hierarchical level in response to the condition of a particular network element represented at the first level.

4. (Currently Amended) The method of claim 3 wherein the communication network is managed in real-time, and further comprising, following the representation of each network element in ~~a~~ the geographical areas:

updating the condition of network elements represented in the first level of the geographical hierarchy; and

in which the summarization of network elements at ~~a~~ the higher level in the geographical hierarchy includes setting ~~an~~ the alarm at the second hierarchical level in response to changes in the condition of network elements.

5. (Currently Amended) The method of claim 4 in which the representation of each network element in ~~a~~ the geographical areas includes representing ~~a~~ the network element as a first icon on a map of geographical areas on the first level of the geographical hierarchy.

6. (Currently Amended) The method of claim 5 in which the representation of each network element in ~~a~~ the geographical areas includes representing the condition of ~~a~~ the network element with ~~a~~ the first icon that varies with respect to the status of the network element.

7. (Currently Amended) The method of claim 6 in which the summarization of network elements at ~~a~~ the higher level in the geographical hierarchy includes representing the status of a plurality of the network elements as a second icon on a map of geographical areas on the second level of the geographical hierarchical.

8. (Currently Amended) The method of claim 7 further comprising, preceding the summarization of network elements at ~~a~~ the higher level in the geographical hierarchy:

establishing a set of rules defining the meaning of the second icon.

9. (Currently Amended) The method of claim 8 in which the summarization of network elements at ~~a~~ the higher level in the geographical hierarchy includes the second icon being the coloration of geographical area.

10. (Currently Amended) The method of claim 8 in which the summarization of network elements at ~~a~~ the higher level in the geographical hierarchy includes summarizing the status of a plurality of the network elements with textual annotation.

11. (Currently Amended) The method of claim 7 wherein management of the network includes the installation of network elements into the communications network, and in which the representation of each network element in ~~a~~ the geographical area includes entering the latitude and a longitude of ~~a~~ the network element upon installation into the network.

12. (Original) The method of claim 8 wherein network management is supervised, and further comprising:

creating supervisor identities; and

in which the establishment of rule-sets includes establishing a set of rules for each supervisor identity.

13. (Original) The method of claim 8 in which the establishment of rule-sets includes defining a set of rules responsive to conditions selected from the group consisting of power source status, software corruption, hardware failure, environmental factors, and intrusion into the network elements.

14. (Currently Amended) The method of claim 1 wherein the communications network is a fixed wireless service (FWS) including base stations and remote units, and in which the representation of each network element in ~~a~~ the geographical area includes representing the geographical positions of network base stations and remote units.

15. (Currently Amended) A method for determining the failure of a network element in a communications network comprising:

representing the communications network as a hierarchy of geographical areas, where an area at a higher level of the hierarchy of geographical areas includes a plurality of areas at a lower level of the hierarchy of geographical areas;

detecting the failure of network elements;

sending an alarm to the higher level in the geographical hierarchy summarizing the failure of the network elements; and

in response to the alarm, identifying and locating failed network elements at a particular lower level of the geographical hierarchy.

16. (Currently Amended) The method of claim 15 in which the representation of the communications network as ~~a~~ the hierarchy of geographical areas includes representing the communications network as a hierarchical arrangement of geographical maps where a map at ~~a~~ the higher level of the hierarchy of geographical areas includes a plurality of maps from the lower level of the hierarchy of geographical areas.

17. (Currently Amended) The method of claim 16 in which the sending of ~~an~~ the alarm to the higher level in the geographical hierarchy summarizing network element failures includes defining an alarm trigger that is responsive to the network element failures.

18. (Currently Amended) A method for determining the failure of a network element in a communications network comprising:

monitoring a geographical map which summarizes the status of a plurality of network elements in the communications network;

on ~~the~~ a map display, receiving an alarm representing the failure of network elements; and

in response to the alarm, narrowing the scale of the map to geographically locate failed network elements.

19. (Currently Amended) A system for presenting a communications network comprising:

a plurality of network elements having geographic locations;

a database including the geographical locations of the network elements;

an application connected to said database to organize the communications network into a hierarchical arrangement of geographic areas, where each network element is located at a lower level in the hierarchy of geographical areas, said application summarizing the representation of ~~a~~ the plurality of network elements at a higher level in the hierarchy of geographical areas;

a display having an input connected to said application to present a modifiable display of network elements as represented in multiple levels in the hierarchy of geographical areas; and

a supervisor interface connected to said application, said supervisor interface providing commands to said application to modify said display.

20. (Original) The system of claim 19 wherein the communications network is a fixed wireless system (FWS); and

in which the network elements are base stations and remote units.

21. (Original) The system of claim 20 in which said base stations and remote units have an operational and a non-operational status;

in which said database is updated on the status of each said base station and remote unit;

in which said application summarizes the status of said base stations and remote units at the higher hierarchical level; and

in which said display presents said application summaries.